

9017  
Sheridan

(1653)

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2002  
16022900RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/509,391DATE: 04/29/2002  
TIME: 14:22:02Input Set : A:\000648.txt  
Output Set: N:\CRF3\04292002\I509391.raw

3 <110> APPLICANT: KRIJGSVELD, Jeroen  
 4 ZAAT, Sebastianus Antonius Johannes  
 5 DANKERT, Jacob  
 6 KUIJPERS, Alma Johanna  
 7 ENGBERS, Gerardus Henricus Maria  
 8 FEIJEN, Jan  
 10 <120> TITLE OF INVENTION: Isolated and Recombinant Antimicrobial Peptides  
 11 Thrombocidin-1 (TC-1) and Thrombocidin-2 (TC-2)  
 12 or Variants Thereof  
 14 <130> FILE REFERENCE: 702 000648  
 16 <140> CURRENT APPLICATION NUMBER: 09/509,391  
 17 <141> CURRENT FILING DATE: 2000-07-07  
 19 <150> PRIOR APPLICATION NUMBER: EP 97202934.2  
 20 <151> PRIOR FILING DATE: 1997-09-25  
 22 <150> PRIOR APPLICATION NUMBER: EP 98201411.0  
 23 <151> PRIOR FILING DATE: 1998-05-01  
 25 <160> NUMBER OF SEQ ID NOS: 18  
 27 <170> SOFTWARE: MS Word 97 SR-2  
 29 <210> SEQ ID NO: 1  
 30 <211> LENGTH: 85  
 31 <212> TYPE: PRT  
 32 <213> ORGANISM: Homo sapiens  
 34 <220> FEATURE:  
 35 <223> OTHER INFORMATION: CTAP-III (connective tissue activating peptide)  
 37 <400> SEQUENCE: 1  
 38 Asn Leu Ala Lys Gly Lys Glu Glu Ser Leu Asp Ser Asp Leu Tyr Ala  
 39 1 5 10 15  
 40 Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys  
 41 20 25 30  
 42 Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly Thr His Cys Asn Gln  
 43 35 40 45  
 44 Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg Lys Ile Cys Leu Asp  
 45 50 55 60  
 46 Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln Lys Lys Leu Ala Gly  
 47 65 70 75 80  
 48 Asp Glu Ser Ala Asp  
 49 85  
 51 <210> SEQ ID NO: 2  
 52 <211> LENGTH: 4  
 53 <212> TYPE: PRT  
 54 <213> ORGANISM: Homo sapiens  
 56 <220> FEATURE:  
 57 <223> OTHER INFORMATION: N-terminus of TC-1a and TC-1b thrombocidins

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59 <400> SEQUENCE: 2  
 60 Ala Glu Leu Arg  
 61 1  
 63 <210> SEQ ID NO: 3  
 64 <211> LENGTH: 68  
 65 <212> TYPE: PRT  
 66 <213> ORGANISM: Homo sapiens  
 68 <220> FEATURE:  
 69 <223> OTHER INFORMATION: TC-1\* thrombocidin variant  
 71 <400> SEQUENCE: 3  
 72 Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro  
 73 1 5 10 15  
 74 Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly Thr His Cys Asn  
 75 20 25 30  
 76 Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg Lys Ile Cys Leu  
 77 35 40 45  
 78 Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln Lys Lys Leu Ala  
 79 50 55 60  
 80 Gly Asp Glu Ser  
 81 65  
 83 <210> SEQ ID NO: 4  
 84 <211> LENGTH: 5  
 85 <212> TYPE: PRT  
 86 <213> ORGANISM: Homo sapiens  
 88 <220> FEATURE:  
 89 <223> OTHER INFORMATION: N-terminus of TC-1d thrombocidin  
 91 <400> SEQUENCE: 4  
 92 Tyr Ala Glu Leu Arg  
 93 1 5  
 95 <210> SEQ ID NO: 5  
 96 <211> LENGTH: 5  
 97 <212> TYPE: PRT  
 98 <213> ORGANISM: Homo sapiens  
 100 <220> FEATURE:  
 101 <223> OTHER INFORMATION: C-terminus of TC-1d thrombocidin  
 103 <400> SEQUENCE: 5  
 104 Ala Gly Asp Glu Ser  
 105 1 5  
 107 <210> SEQ ID NO: 6  
 108 <211> LENGTH: 83  
 109 <212> TYPE: PRT  
 110 <213> ORGANISM: Homo sapiens  
 112 <220> FEATURE:  
 113 <223> OTHER INFORMATION: TC-2 thrombocidin  
 115 <400> SEQUENCE: 6  
 116 Asn Leu Ala Lys Gly Lys Glu Glu Ser Leu Asp Ser Asp Leu Tyr Ala  
 117 1 5 10 15  
 118 Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys  
 119 20 25 30

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120 Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly Thr His Cys Asn Gln  
 121 35 40 45  
 122 Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg Lys Ile Cys Leu Asp  
 123 50 55 60  
 124 Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln Lys Lys Leu Ala Gly  
 125 65 70 75 80  
 126 Asp Glu Ser  
 128 <210> SEQ ID NO: 7  
 129 <211> LENGTH: 34  
 130 <212> TYPE: DNA  
 131 <213> ORGANISM: Homo sapiens  
 133 <220> FEATURE:  
 134 <223> OTHER INFORMATION: Forward primer  
 136 <220> FEATURE:  
 137 <221> NAME/KEY: misc\_feature  
 138 <222> LOCATION: (5)...(10)  
 139 <223> OTHER INFORMATION: BamHI restriction site  
 141 <400> SEQUENCE: 7  
 142 tataggatcc atgaggctca gacttgatac cacc 34  
 144 <210> SEQ ID NO: 8  
 145 <211> LENGTH: 38  
 146 <212> TYPE: DNA  
 147 <213> ORGANISM: Homo sapiens  
 149 <220> FEATURE:  
 150 <223> OTHER INFORMATION: Reverse primer  
 152 <220> FEATURE:  
 153 <221> NAME/KEY: misc\_feature  
 154 <222> LOCATION: (5)...(10)  
 155 <223> OTHER INFORMATION: BamHI restriction site  
 157 <220> FEATURE:  
 158 <221> NAME/KEY: terminator  
 159 <222> LOCATION: (11)...(13)  
 160 <223> OTHER INFORMATION: Stop sequence  
 162 <400> SEQUENCE: 8  
 163 tataggatcc tcaatcagca gattcatcac ctgccaat 38  
 165 <210> SEQ ID NO: 9  
 166 <211> LENGTH: 33  
 167 <212> TYPE: DNA  
 168 <213> ORGANISM: Homo sapiens  
 170 <220> FEATURE:  
 171 <223> OTHER INFORMATION: Forward primer for CTAP-III and TC-2  
 173 <220> FEATURE:  
 174 <221> NAME/KEY: misc\_feature  
 175 <222> LOCATION: (7)...(12)  
 176 <223> OTHER INFORMATION: NdeI restriction site  
 178 <400> SEQUENCE: 9  
 179 gtgtaacata tgaacttggc gaaaggcaaa gag 33  
 181 <210> SEQ ID NO: 10  
 182 <211> LENGTH: 33

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183 <212> TYPE: DNA  
 184 <213> ORGANISM: Homo sapiens  
 186 <220> FEATURE:  
 187 <223> OTHER INFORMATION: Forward primer for NAP-2 and TC-1\*  
 189 <220> FEATURE:  
 190 <221> NAME/KEY: misc\_feature  
 191 <222> LOCATION: (7)...(12)  
 192 <223> OTHER INFORMATION: NdeI restriction site  
 194 <400> SEQUENCE: 10  
 195 gtgttaacata tgtatgctga actccgctgc atg 33  
 197 <210> SEQ ID NO: 11  
 198 <211> LENGTH: 36  
 199 <212> TYPE: DNA  
 200 <213> ORGANISM: Homo sapiens  
 202 <220> FEATURE:  
 203 <223> OTHER INFORMATION: Forward primer for TC-1  
 205 <220> FEATURE:  
 206 <221> NAME/KEY: misc\_feature  
 207 <222> LOCATION: (7)...(12)  
 208 <223> OTHER INFORMATION: NdeI restriction site  
 210 <400> SEQUENCE: 11 36  
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 213 <210> SEQ ID NO: 12  
 214 <211> LENGTH: 68  
 215 <212> TYPE: PRT  
 216 <213> ORGANISM: Homo sapiens  
 218 <220> FEATURE:  
 219 <223> OTHER INFORMATION: TC-1 thrombocidin  
 221 <400> SEQUENCE: 12  
 222 Leu Arg Cys Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn  
 223 1 5 10 15  
 224 Ile Gln Ser Leu Glu Val Ile Gly Lys Gly Thr His Cys Asn Gln Val  
 225 20 25 30  
 226 Glu Val Ile Ala Thr Leu Lys Asp Gly Arg Lys Ile Cys Leu Asp Pro  
 227 35 40 45  
 228 Asp Ala Pro Arg Ile Lys Lys Ile Val Gln Lys Lys Leu Ala Gly Asp  
 229 50 55 60  
 230 Glu Ser Ala Asp  
 231 65  
 233 <210> SEQ ID NO: 13  
 234 <211> LENGTH: 70  
 235 <212> TYPE: PRT  
 236 <213> ORGANISM: Homo sapiens  
 238 <220> FEATURE:  
 239 <223> OTHER INFORMATION: NAP-2 (neutrophil activating peptide)  
 241 <400> SEQUENCE: 13  
 242 Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro  
 243 1 5 10 15  
 244 Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly Thr His Cys Asn

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245               20                       25                       30  
246 Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg Lys Ile Cys Leu  
247               35                       40                       45  
248 Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln Lys Lys Leu Ala  
249               50                       55                       60  
250 Gly Asp Glu Ser Ala Asp  
251       65                       70  
253 <210> SEQ ID NO: 14  
254 <211> LENGTH: 69  
255 <212> TYPE: PRT  
256 <213> ORGANISM: Escherichia coli  
258 <220> FEATURE:  
259 <223> OTHER INFORMATION: rMTC-1\* (TC-1\* carrying an additional N-terminal methionine)  
261 <400> SEQUENCE: 14  
262 Met Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser Gly Ile His  
263       1                       5                       10                       15  
264 Pro Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly Thr His Cys  
265       20                       25                       30  
266 Asn Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg Lys Ile Cys  
267       35                       40                       45  
268 Leu Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln Lys Lys Leu  
269       50                       55                       60  
270 Ala Gly Asp Glu Ser  
271       65  
273 <210> SEQ ID NO: 15  
274 <211> LENGTH: 84  
275 <212> TYPE: PRT  
276 <213> ORGANISM: Escherichia coli  
278 <220> FEATURE:  
279 <223> OTHER INFORMATION: rMTC-2 (TC-2 carrying an additional N-terminal methionine)  
281 <400> SEQUENCE: 15  
282 Met Asn Leu Ala Lys Gly Lys Glu Glu Ser Leu Asp Ser Asp Leu Tyr  
283       1                       5                       10                       15  
284 Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro  
285       20                       25                       30  
286 Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly Thr His Cys Asn  
287       35                       40                       45  
288 Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg Lys Ile Cys Leu  
289       50                       55                       60  
290 Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln Lys Lys Leu Ala  
291       65                       70                       75                       80  
292 Gly Asp Glu Ser  
294 <210> SEQ ID NO: 16  
295 <211> LENGTH: 91  
296 <212> TYPE: PRT  
297 <213> ORGANISM: Escherichia coli  
299 <220> FEATURE:  
300 <223> OTHER INFORMATION: rYTC-1 (TC-1 with an N-terminal His-tag, plus a tyrosine residue)  
302 <220> FEATURE:

**VERIFICATION SUMMARY**

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